



Odonata collected in the Canary Islands

by

JEAN BELLE

ABSTRACT. — Odonatological results of an excursion to the Canary Islands are placed on record. *Ischnura saharensis* Agassiz is new to the Canary Islands. Two Aeshnid species are new to Gran Canaria. A summary, in a tabular form, of the distributional data of the Odonata recorded from the Canary Islands is added.

INTRODUCTION

In February 1981 I went to the Canary Islands for dragonfly collecting. Four islands of the archipelago were visited but collecting was confined to the extreme southern tip of the island of Gran Canaria when I discovered there a number of artificial ponds of relatively recent construction in a rather saline environment (Campo Golf "Maspalomas"). Most of these ponds were seriously polluted and unsuited as breeding places but three ponds, one with clear water and two with turbid water, proved to be rather good dragonfly localities. From this area odonate material could be assembled during the period from 15 to 24 February.

CONSPECTUS OF MATERIAL COLLECTED

1. *Ischnura saharensis* Agassiz, 1958: 5 ♂ (adult and semi-adult), 1 ♀ (semi-adult, heterochromatic), 1 ♀ (newly hatched, isochromatic) and its exuviae, the exuviae of a ♂. Many other specimens were seen.

The imagines fit fairly well the detailed description given by Lieftinck (1966) for examples from Morocco. The species is new to the fauna of the Canary Islands.

2. *Crocothemis erythraea* (Brullé, 1832): 4 ♂ (adult). Many more males were observed. The species was seen in copula and depositing its eggs in the pond with clear water.

The present males exhibit some geographical variation. If compared with the European representatives of this species they are somewhat larger (abd. + app. 26-29 mm, hind wing 31-33 mm) whereas the basal spots on the hind wings are much smaller but no difference in the structure of the prothorax is found.

C. erythraea was recorded from Fuerteventura by Brauer (1900), from La Palma by Navás (1906), from Gomera by Valle (1935), and from Gran Canaria and Tenerife by Gardner (1960). The reference papers refer to the latest captures.

3. *Anax parthenope* Selys, 1839: 7 ♂ (adult and semi-adult), 1 ♀ (adult), 2 exuviae of mature larvae (♂ and ♀) and several exuviae of immature larvae. Several other imagoes were observed flying along the shores of the ponds. Two females ovipositing tandem were seen, one of which was captured.

Measurements: ♂ abd. + app. 50-53 mm, hind wing 46-48 mm; ♀ abd. + app. 49 mm, caud. app. 4.8 mm, hind wing 40.5 mm.

This is the first record of the species from Gran Canaria. It was recorded from Lanzarote and Fuerteventura by Brauer (1900), and from Tenerife by Navás (1906).

4. *Hemianax ephippiger* (Burmeister, 1839): 1 ♂ (adult).

This African species was hitherto recorded from Tenerife only (Navás, 1906). The present male was netted when it was flying along the shores of a pond. No female was observed.

ADDITIONAL RECORDS

Besides the species collected by myself and listed above, the following ones were reported from the diverse islands of the archipelago:

Tabular view of the Odonata recorded from the Canary Islands

	Lanzarote	Fuerteventura	La Palma	Gome ra	Hierro
Cocnagrionidae						
1. <i>Ischnura saharensis</i>						
2. <i>I. senegalensis</i>						
Aeshnidae						
3. <i>Anax imperator</i>					X	
4. <i>A. parthenope</i>	X	X				
5. <i>Hemianax ephippiger</i>						
Libellulidae						
6. <i>Crocothemis erythraea</i>		X		X	X	
7. <i>Orthetrum chrysostigma</i>		X		X	X	X
8. <i>Sympetrum fonscolombei</i>	X	X		X	X	
9. <i>S. nigrifemur</i>			X	X		
10. <i>Trithemis arteriosa</i>			X	X	X	
11. <i>Zygonyx torrida</i>			X	X	X	

5. *Ischnura senegalensis* Rambur, 1842. Recorded from Gran Canaria by Valle (1955).

The Zygoptera formerly collected in Gran Canaria by Lindberg and known to be in the collection of the Zoological Museum of the University at Helsinki could not be located. Mr. Vesa Varis of the same institution kindly sent me for study ten of the *Ischnura* examples (females only) from the Azores referred to *senegalensis* by Valle (1940). These females, however, proved to belong to another species as judged by the very small vulvar spine. This misidentification arouses grave doubt about the correctness of Valle's determination of the *Ischnura* species from Gran Canaria.

6. *Anax imperator* Leach, 1815. Recorded (under *Anax formosus* Vander Linden) from Gomera by Brauer (1900), from Gran Canaria by Valle (1935), and from Tenerife by Gardner (1960).

7. *Orthetrum chrysostigma* (Burmeister, 1839). Recorded from Fuerteventura and Hierro by Brauer (1900), from Tenerife, La Palma and Gomera by Valle (1935), and from Gran Canaria by Gardner (1960).

8. *Sympetrum fonscolombei* (Selys, 1840). Recorded from Lanzarote (islet of Roque del Este), Fuerteventura (islet of Lobos) and Gomera by Brauer (1900), from La Palma by Lieftinck (1949), and from Gran Canaria and Tenerife by Gardner (1960).

9. *S. nigrifemur* (Selys, 1884). Recorded (under *S. striolatum nigrifemur*) from Gran Canaria by Valle (1935), and from Tenerife by Lieftinck (1949).

10. *Trithemis arteriosa* (Burmeister, 1839). Recorded from Gomera by Navás (1906), from Tenerife by Lieftinck (1949), and from Gran Canaria by Gardner (1960).

11. *Zygonyx torrida* (Kirby, 1889). Recorded (under *Pseudomacromia torrida*) from Gran Canaria and Tenerife by Navás (1906), and from Gomera by Valle (1935).

Remark. — Two uncertain records from the Canary Islands, viz. *Libellula depressa* Linnaeus

and *Palpopleura lucia* (Drury) (under *Palpopleura marginata* Fabricius), by McLachlan (1883) are disregarded in the synopsis.

CONCLUSIONS

Gran Canaria has the best breeding possibilities for dragonflies of all Canary Islands, among others owing to the many cisterns and large water reservoirs caused by weirs in the ravines or "barrancos". All dragonfly species reported from the other Canary Islands also occur in this island. An analysis of the accompanying distributional table shows that 11 species are known from the Canary Islands and that they are grouped as follows: Lanzarote 2, Fuerteventura 4, Gran Canaria 11, Tenerife 9, La Palma 3, Gomera 6, and Hierro 1.

REFERENCES

- Brauer, F., 1900. Über die von Prof. O. Sillimont auf den Canaren gesammelten Neuroptera und Pseudonuroptera (Odonata, Corrodentia et Ephemeroidea). — *Sber. K. Akad. Wiss. Wien., Math.-Nat. Classe* 109 (1): 464-477.
- Gardner, A. E., 1960. Odonata, Saltatoria and Dictyoptera collected by Mr. E. S. A. Baynes in the Canary Islands, 1957 to 1959. — *Entomologist* 93: 128-131.
- Lieftinck, M. A., 1949. On a small collection of Odonata from Tenerife and La Palma. — *Tijdschr. Ent.* 91: 6.
- , 1966. A survey of the dragonfly fauna of Morocco (Odonata). — *Bull. Inst. r. Sci. nat. Belg.* 42 (35): 1-63.
- McLachlan, R., 1883. The Neuroptera of Madeira and the Canary Islands. — *Jour. Linn. Soc. (Zool.)* 16: 149-183.
- Navás, L., 1906. Catálogo descriptivo de los Insectos Neuropteros de las Islas Canarias. — *Revista R. A. Cienc. exact. fis. nat. Madr.* 4(6): 1-24. figs. 1-7.
- Valle, K. J., 1935. Iter entomologicum ad Insulas Canariensis anno 1931 a Richard Frey et Ragnar Stora factum. No. 5. Die Odonaten der Kanarischen Inseln. — *Comment. biol.* 6(5): 1-7.
- , 1940. Iter entomologicum et botanicum ad insulas Madeiram et Azores anno 1938 a Richard Frey, Ragnar Stora et Carl Cedercreutz factum. No. 5. Odonaten von den Azoren und Madeira. — *Comment. biol.* X(5): 1-7.
- , 1955. Zygopteren (Odonata) von den Kanarischen Inseln. — *Ann. ent. fenn.* 21: 182.

Onder de Beumkes 35, 6883 HC Velp, the Netherlands.